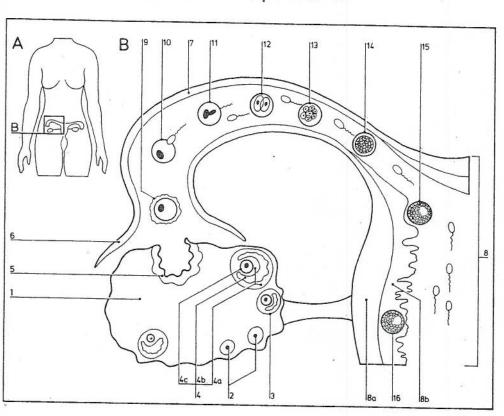
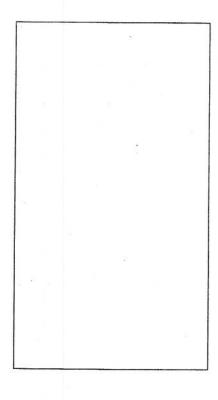
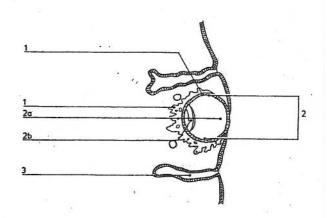
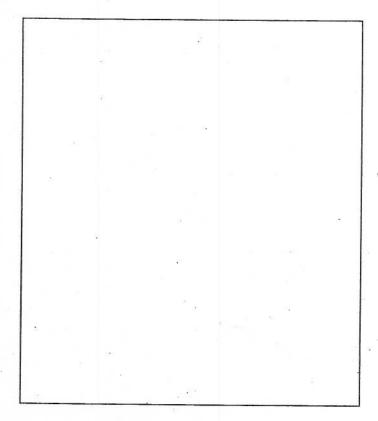
## Fertilization and Implantation



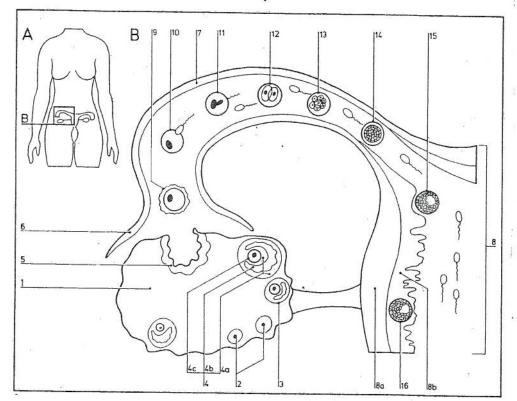


## Implantation of Blastocyst



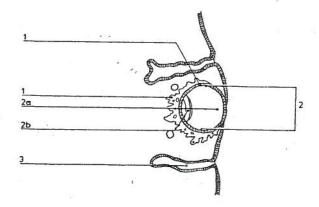


## Fertilization and Implantation



- 1. ovary
- 7. fallopian tube
- 8. uterus
- 9. ovulation
- 10. sperm penetrates ovum
- 11. fertilization (zygote)
- 12. first division by mitosis
- eight cell stage (morula)
- 14. sixty-four cell stage
- 15. blastocyst
- 16. blastocyst embedded in lining of uterus

## Implantation of Blastocyst



- 1. trophoblast
- 2. blastocyst
- 2a. blastocyst cavity
- 2b. inner cell mass (stem cells)
- 3. uterus

Repeated division of the zygote result in a blastocyst, a sphere of cells with a large fluid-filled center. The blastocyst sinks into the uterine lining and becomes firmly embedded. During the early stages of development the new individual is called an embryo.